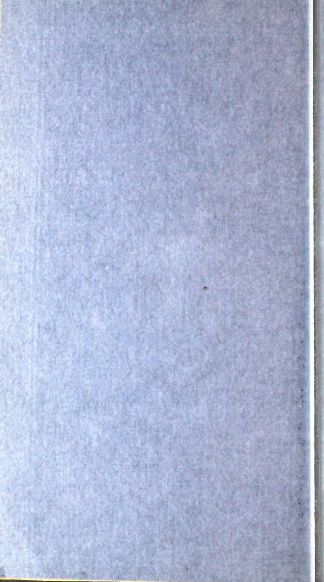


FANS AND BLOWERS

CONDENSED CATALOGUE



SIXTH EDITION



JUNE 15, 1914

Ilg Electric Ventilating Company

General Offices and Works:

Whiting and Wells Sts., Chicago, Ill.

CONDENSED CATALOGUE

THIS is simply a brief catalogue for pocket use. If you desire further information, write for our perpetual loose leaf catalogue, containing encyclopedia of engineering data and full description of all of our products.

¶ We build Propeller Fans in all sizes, all speeds and for any current, voltage or frequency.

¶ We build direct connected and belted Blowers and Exhausters in all sizes from 25 inches to 120 inches, for any current or voltage.

¶ We also build Shavings Exhausters, Forge Blowers, Volume Blowers, Portable Ventilating Sets and Mechanical Draft Apparatus.

Ventilation in General

Free air is understood to be air devoid of vacuum, counter currents or pressure.

Propeller or disc type Fans will not work against any great amount of pressure, and whenever possible it is advisable to install same so they will have a free inlet and exhaust.

Where Fan installation is intended in buildings over six stories in height, allowance should be made for the natural air currents existing, due to the artificial heating of building in the winter months. Warm air tends to create a strong upward flow, which causes a vacuum in lower floors and a plenum condition in upper floors; for this reason Fan should be of larger size to overcome the loss of air capacity due to adverse current, and for extreme conditions, centrifugal Exhausters or Blowers are recommended.

Ducts if necessary should be as large or larger than Fan areas, but avoid them if possible, as they offer more or less resistance to the movement of air, and consequent loss of air capacity, with the exception of their installation in restaurants, where a ventilating duct or stack, as it is usually called, has a tendency of accelerating the upward currents due to the heat generated from the ranger.

Office Ventilation

For office ventilation, the Fan should be located at a point where exhaust openings can be secured farthest from windows and doors, so that the fresh air, being drawn from the opposite end to the Fan through windows or openings, must be drawn through the whole room before being expelled by the Fan. This gives ideal and draftless ventilation.

Churches and Halls

For halls and churches, it is preferable to locate the Fan in some adjacent room, as absolute quietness is essential, and openings should be provided for between wall or partition leading to the main hall or auditorium by the installation of registers or screens. The air should be changed about every 5 to 10 minutes..

Illustration—Room 50'x100'x10' ceiling = 50,000 cu. ft. $\div 5 = 10,000 =$ (min. change of air) 30" to 36" Fan. (See Air Capacity of Fans, page 6.)

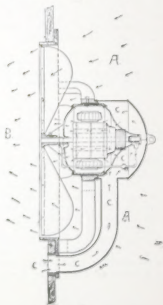
Restaurant Ventilation

In restaurants the Fan should be located, if possible, in the kitchen close to the range. To get the best results, the air should be changed about every two minutes. If it is not possible to locate the Fan in the rear, it is found to be good practice to place a Fan in the front to remove the hot air from the ceiling. A small rectangular duct could be run from the Fan to the range, to connect with a hood over range, and in this way utilize a portion of the capacity of the Fan to exhaust heat from the range.

The Self-Cooled Fan

The illustration below shows our patented method of ventilating the motor. It has been proven by experience that open type motors are unsatisfactory for exhaust fan purposes, owing to the collection of dust or other foreign matter in the motor. If an enclosed non-ventilated type is used its efficiency is decreased, owing to the consequent overheating of the armature and field coils.

The Ilg Self-Cooled Fan meets both these conditions, using an enclosed type motor, ventilating it at the same time. The ventilation of the motor is accomplished by the vacuum created in the front of the center or axis of the fan drawing air from the outside through the tube connecting with the hood which completely encloses the motor on all sides but the front. After ventilating the motor the air is carried away with the general exhaust.



Selling Points for Ilg Propeller Fans

Why They Are Best for You

You are selling a high grade machine, a machine that will help your general reputation. Purchasers of Ilg Fans come back for more. Contractors who have pushed our Fans now sell them exclusively because they know. Ilg Fans are made for alternating and direct current for any voltage or frequency. You do not have to talk one Fan for alternating current and another for direct current. **This is a very important point.** Ilg Fans are kept in stock and can be shipped immediately. Ilg Fans are the easiest and cheapest to install. The round-bodied motor that slips easily out of the ring is responsible for this. **And most important to you,** you can make more money on Ilg Fans than on others.

Why They Are Best for Your Customers

It is the only Fan with motor **protected, yet air cooled.** Motors in Ilg Fans operate at full load with an efficiency of 85%. Motors in other fans, being enclosed, operate at about two-thirds load with an efficiency of 60% to 65%. This means a saving on the power bill of about 25%, and we can prove it from actual figures. With a 36" Fan running under average conditions in the average city, this saving amounts to \$5.00 a month. Ilg Fans will deliver a given quantity of air with a lower power consumption than any other fan. This is made possible by our patented air cooling feature, and we are willing to pay the expenses, of any certified test made anywhere that will disprove this claim. Ilg Fans deliver the air for which they are rated, **always.** There are other makes of fans rated higher, but they do not come up to ratings, and we have figures to prove it. Ilg Fans run as nearly without repairs as it is possible to have machinery run. The owners of big Lunch Room Systems in big cities now use Ilg Fans for this reason if no other. They each have many fans in operation and have found from experience what other fans cost to run. Some Ilg Fans have been running 5 years with no repairs except new brushes. Ilg Fans are the best appearing and quietest running fans on the market and the only fans with bearings combined for oiling. Ilg Fans are covered by a rigid guarantee.

DIRECT CURRENT

Propeller Fans

THE ONLY Self-Cooled Protected Fan.
Combined Oiling Device.
Interchangeable Motor System.

Code Words	Type Size	Cu. Ft. of Air per Min.	Watts Consumed Per Hour	Speed Free Air	PRICE			Approx. Ship'g Wgt.
					110 Volt	220 Volt	500 Volt	
Abide...	16B	1600	90	1200	\$ 77	\$ 80	40
Able...	18A	2530	110	1630	100	104	80
Act.....	18B	3860	154	1000	124	129	95
Aim....	20B	4500	198	900	180	185	\$188	175
Alto....	24A	6000	275	800	210	215	220	220
Amber..	24B	8100	418	800	255	260	268	300
Anchor..	30A	9200	440	700	290	296	310	335
Annex..	30B	11000	495	700	335	342	354	360
Antic...	36A	12500	550	600	350	358	368	395
Anvil...	36B	15000	770	600	408	417	430	450
Apex...	42B	18000	880	500	486	497	512	600
Apt.....	48B	26400	1320	450	574	587	602	830
Argos...	54B	33500	1780	400	850	865	883	1100
Ark.....	60B	40000	2270	360	960	972	1017	1500
Astro...	72B	60000	2880	270	1260	1284	1320	2230

Code indicates motors wound for 110 volts; prefix letter T for 220 volt, letter K for 500 volt.

For vertical running Fans, add 10 per cent to list price, same discount applying.

Type "A" is not furnished for vertical operation.

Variable speed controllers are furnished with D. C. Fans from 20 inches upwards, giving approximate 50% speed reduction by intermediate steps.



This is very economical where full speed is not always desirable. A small regulator is furnished with 18" D. C. Fan. This regulator serves to regulate the speed of Fan.

ALTERNATING CURRENT

Propeller Fans

Single Phase—60 cycle.

Code Word	Size Type	Cu. Ft. of Air per Min.	Watts Consumed per Hr.	Speed	PRICE		Approx. Ship'g Wgt.
					110 Volt	220 Volt	
Atend	16S	1600	100	1200	\$ 70	\$ 74	50
Atom	18S	4000	150	1140	130	134	90
Azoth	20S	5000	190	1140	178	182	130
Augur	24S	7000	210	850	224	229	180
Axis	30S	9000	440	690	320	327	280
Azure	36S	14000	600	565	430	438	390
Azym	42S	17800	800	490	520	530	520

Polyphase—60 cycles

Code Word	Size Type	Cu. Ft. of Air per Min.	Watts Consumed per Hr.	Speed 60 cycles	PRICE		Approx. Ship'g Wgt.
					100 to 200 Volt	440 to 550 Volt	
Acus.	18M	3840	180	1140	\$144	\$153	103
Agy...	20M	5000	200	1140	168	178	150
Adelo	24M	7000	230	850	208	220	220
Adhoc	30M	9000	400	690	284	300	335
Adonis	36M	14000	600	570	348	366	402
Adox	42M	20000	800	570	417	436	610
Adula	48M	27200	1100	490	488	500	830
Adocy	54M	34000	1700	420	693	708	1100
Adras	60M	42000	2200	380	907	931	1500
Adult	72M	62000	2800	285	1100	1120	2200

Code indicates 100 volt; prefix letter T for 200, letter K for 440, letter Q for 550 volts.

NOTE: Code in alternating current indicates 60 cycle, suffix letter "F" for 25; letter "G" for 30; letter "H" for 40.

Add 5 per cent to list price for 25, 30 and 40 cycle.

Prices on application for 133 cycle.

For vertical running alternating Fans add 15 per cent to list price.

Distinctive The Self

Frame

Flanges are liberally proportioned, protecting fan wheel and making a pleasing and durable installation possible.

Motor Ring

Securely bolted to arms. Motor is machined circular to template, which makes it practical to install motor and frame separately without disturbing alignment.

Oiling System

Both bearings from 20" to 72" D. C. Fans uniformly oiled from one point, making it the only fan safely oiled while in operation.



Supplying motor with clean, cool air, reducing
Finish:—Fan is finished with a high grade olive green

Features

Cooled Fan



Support Arms

Hand forged from machine steel, light, strong and non-breakable.

Motor Inclosure

Protects working parts of motor against dust, grease, steam or foreign matter, which eventually will damage motor.

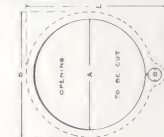
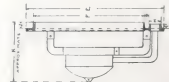
Wheel

Steel spokes and rims electrically welded, blades stamped to template. Hub bored and reamed, making wheel perfectly true and running without vibration, insuring long life to bearings.

ipe
ing temperature, thus increasing its efficiency.
amel varnish, durable and pleasing in appearance.

INSTALLATION DIMENSIONS FOR SELF COOLED FAN.

Dimensions are subject to variations in castings for very particular work. Send for classed measurements.



Fan	A	B	C	D	E	F	G	H	I	J	K	Ap.Wt.
18"	21	21	1	21	21	18	1	2	11	18	12	46119
20"	21	21	1	21	21	20	1	2	11	18	15	126"
24"	21	21	1	21	21	24	1	2	1	2	18	143"
30"	31	31	1	31	31	30	1	3	18	23	25	254"
36"	31	31	1	31	31	36	1	3	18	23	25	326"
42"	41	41	1	41	41	42	1	4	18	23	25	458"
48"	41	41	1	41	41	48	1	4	18	23	25	640"
54"	51	51	1	51	51	54	1	5	18	23	25	750"
60"	61	61	1	61	61	61	1	5	18	23	25	1140"

Note—Measurements A and B are diameter of openings to be cut for installation.

ILG ELECTRIC VENTILATING CO CHICAGO ILL

"Ilg" Volume Blowers



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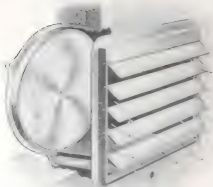
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No.	Date	Time	Loc.	Temperature		Wind	Direction	Remarks
				Air	Water			
1	10/10/19	10:00	10	20.0	20.0	10	SE	Clear
2	10/10/19	11:00	10	20.0	20.0	10	SE	Clear
3	10/10/19	12:00	10	20.0	20.0	10	SE	Clear
4	10/10/19	13:00	10	20.0	20.0	10	SE	Clear
5	10/10/19	14:00	10	20.0	20.0	10	SE	Clear
6	10/10/19	15:00	10	20.0	20.0	10	SE	Clear
7	10/10/19	16:00	10	20.0	20.0	10	SE	Clear
8	10/10/19	17:00	10	20.0	20.0	10	SE	Clear
9	10/10/19	18:00	10	20.0	20.0	10	SE	Clear
10	10/10/19	19:00	10	20.0	20.0	10	SE	Clear

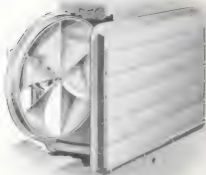
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"Ilg" Automatic Louvers



FAN RUNNING



FAN NOT RUNNING

"Ilg" Automatic Louvers

The "Ilg" Automatic Louver consists of a special weathered aluminum frame, mounted on a heavy base, and designed to be fixed in position.

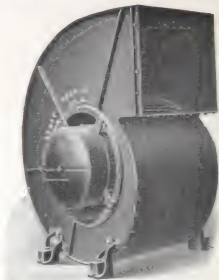
The "Ilg" Louver (patented) has a special weathering surface which allows it to last longer than other louvers. The surface of the louvers is treated with a special weathering treatment which allows it to last longer than other louvers. The surface of the louvers is treated with a special weathering treatment which allows it to last longer than other louvers.

These louvers are made with a frame of 1/2 inch aluminum. They are made with a frame of 1/2 inch aluminum. They are made with a frame of 1/2 inch aluminum. They are made with a frame of 1/2 inch aluminum.

For more information on the "Ilg" Automatic Louvers, please contact us at 1234 Main Street, New York, N.Y. 10001. We will be glad to answer any questions you may have.

Size	Material	Price	Weight
12	Al.	\$15.00	14 lbs.
18	Al.	25.00	25
24	Al.	35.00	35
30	Al.	45.00	45
36	Al.	55.00	55
42	Al.	65.00	65
48	Al.	75.00	75
54	Al.	85.00	85
60	Al.	95.00	95
66	Al.	105.00	105
72	Al.	115.00	115

Universal Blowers



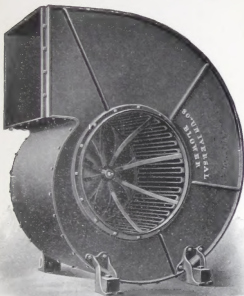
Model 200

The construction of the Blowers and Exhausters is a distinct departure from methods heretofore employed by blower or fan manufacturers. The motor is machined circular and set partially into the housing, giving a compactness never before accomplished in blower or fan construction. The motor is supported by a cast iron ring bolted to the housing. The inlet side has a similar casting fastened in the same manner.

The holes in both castings are equally spaced, drilled to template, making it possible to change any blower from right to left hand drive, or vice versa. This construction also permits the discharge to be swung to any angle. The use of the round body type motor and the method of support makes it possible to interchange or replace motor without disturbing the alignment.

Both bearings are combined and are oiled simultaneously from accessible side of the motor.

Universal Blowers



SUCTION SIDE

Machines of the type shown above built for any current or voltage, in sizes from 25-inch to 80-inch; air deliveries from 1,400 c. f. m. to 30,000 c. f. m.

Our Engineering Department is at your service. Write for our complete catalogue, giving full information on blowers and exhausters for all purposes.

Send in your problems to us with full details and we shall help you solve them.

See next page for performance tables for blowers.

“Ilg” Universal Blowers

SPEEDS CAPACITIES & H.P. OF ILG
BLOWERS AT VARIOUS PRESSURE

SIZE	DIAM. OF WHEEL		1/2 OZ	3/4 OZ	1 OZ	1 1/4 OZ	1 1/2 OZ	2 OZ
25'	14"	CU. FT.	1400	1715	1995	2240	2415	2600
		R.P.M.	720	660	1030	1140	1230	1430
		H.P.	.24	.415	.67	.91	1.07	1.3
30'	16 1/2"	CU. FT.	2000	2450	2850	3200	3450	4000
		R.P.M.	610	760	870	850	1030	1220
		H.P.	.344	.60	.87	1.15	1.47	2.2
35'	19 1/2"	CU. FT.	2720	3330	3875	4350	4690	5440
		R.P.M.	530	660	750	820	900	1050
		H.P.	.47	.87	1.2	1.67	2.14	3.1
40'	22"	CU. FT.	3540	4335	5040	5660	5990	7060
		R.P.M.	460	560	660	720	790	980
		H.P.	.67	1.27	1.74	2.27	2.67	4.3
45'	25"	CU. FT.	4500	5510	6410	7200	7760	9000
		R.P.M.	410	510	580	630	700	810
		H.P.	.87	1.47	2.00	2.60	3.20	4.5
50'	27 1/2"	CU. FT.	5540	6780	7890	8860	9550	11080
		R.P.M.	370	460	530	580	640	740
		H.P.	1.07	1.74	2.40	3.07	3.90	4.9
55'	30 1/2"	CU. FT.	6100	7470	8690	9760	10520	13200
		R.P.M.	330	410	470	510	570	660
		H.P.	1.2	1.87	2.67	3.46	4.60	6.0
60'	33"	CU. FT.	6000	9800	11400	12800	13600	16000
		R.P.M.	370	360	430	470	520	610
		H.P.	1.55	2.25	3.20	4.55	6.30	10.0
70'	39"	CU. FT.	10660	13320	15500	17400	18760	21760
		R.P.M.	260	330	370	400	460	550
		H.P.	2.06	3.1	4.40	6.35	7.75	14.3
80'	44"	CU. FT.	14660	17950	20690	23450	25260	29300
		R.P.M.	240	300	340	370	410	480
		H.P.	2.8	4.15	6.00	8.55	11.80	20.0

